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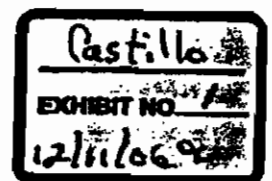
Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF HAWAII

'ILIO'ULAOKALANI COALITION, a)	Civil No. 04-00502 DAE BMK
Hawai'i nonprofit corporation; NĀ 'IMI)	
PONO, a Hawai'i unincorporated)	PLAINTIFFS' DISCLOSURE RE:
association; and KĪPUKA, a Hawai'i)	EXPERT OPINIONS OF JOHN
unincorporated association,)	MICHAEL CASTILLO
)	
Plaintiffs,)	
)	
v.)	
)	
DONALD H. RUMSFELD, Secretary of)	
Defense; and FRANCIS J. HARVEY,)	
Secretary of the United States)	
Department of the Army,)	
)	
Defendants.)	
)	
)	

PLAINTIFFS' DISCLOSURE RE:
EXPERT OPINIONS OF JOHN MICHAEL CASTILLO



Pursuant to the Court's instructions at the status conference held on December 8, 2006, plaintiffs 'Īlio'ulaokalani Coalition, Nā 'Imi Pono, and Kīpuka hereby disclose the opinions to be offered by expert witness John Michael Castillo, together with a brief description of the rationale for those opinions:

1. The high-elevation dry forest at Pōhakuloa Training Area ("PTA") is one of the rarest on the planet and constitutes one of Hawai'i's ecological jewels.

Rationale:

- Hawai'i's evolution as a high island archipelago isolated from continents and other major land masses provided for the development of the most highly endemic ecosystems.
- Arid environments are among the world's most endangered ecosystems, currently having been reduced by over 85%, particularly in low elevations.
- Dryland environments on tropical islands have been more heavily impacted by human activity and land uses than wet environments.
- Upland environments, such as those that occur at PTA, support the largest and most contiguous remaining native-dominated forest and shrubland.
- PTA is home to many critically endangered plants and animals.

2. The existence of native-dominated plant communities and rare species at PTA does not indicate a tolerance to military training and associated fires; they are remnant vestiges of dwindling habitats.

Rationale:

- While the ecosystem at PTA is still relatively intact, it is experiencing unchecked invasion by fire-promoting fountain grass (*Pennisetum setaceum*).
- Invasive fountain grass is a high loading, fine fuel that carries most of the large fires in the region.
- Population data for rare plant species at PTA show declines between 1993 and 2003 in the number of populations and total individuals of nearly every threatened and endangered plants species that occurs on the installation.
- There are visible reductions in the distribution of native plant communities and increases in alien grasslands throughout the impact area and northwestern, northern, and northeastern portions of the installation.

3. The continued spread of fountain grass has created a more severe wildfire threat than has ever existed previously and the threat is growing.

Rationale:

- Fountain grass now forms nearly continuous stands throughout the western, northern and eastern portions of the installation.
- The fountain grass distribution is spreading across the young lavas to connect many of the pockets of older, wooded kipuka that have historically supported fountain grass and fire.
- Large stands of fountain grass span the Impact Area boundary in Ranges 8, 9, 10, and 11T.

4. Existing and proposed measures to manage and reduce wildfire risk are narrow in scope, inadequate in scale, under-funded, and likely to fail.

Rationale:

- The most pressing resource management issue at PTA is the increasing risk from wildfire resulting from training and alien grass invasion throughout the installation.
- At PTA, most fires start from military training.
- Minimum fire-fighting personnel and equipment resources identified in the Integrated Wildland Fire Management Plan and Biological Assessment are inadequate, particularly to respond to multiple fires at one time or large-scale incidents.

- Existing and proposed wildfire fuels reduction measures are inadequate to control or contain the spread of fountain grass or effectively manage large fires.
- History has shown that the Army's fire management plans, even when they look good on paper, are not properly implemented, resulting in catastrophic fires from training-related activities.

5. The Stryker-related training proposed to be conducted at ranges 8, 10, and 11T, as well as at various 120mm mortar firing points, would increase the risk of catastrophic wildfires beyond the levels poses by non-Stryker training, threatening destruction of unique alpine ecosystems and federally listed species.

Rationale:

- Historic wildfire records show many fires associated with training at Ranges 8, 10, and 11T.
- Stryker training would exacerbate the fire-grass invasion cycle through adding disturbance factors that increase the risk of fire by promoting the increase in fine fuel loads through disturbance and weed spread, and increasing the number of ignition sources.
- Stryker training would increase the use of tracers, which are the largest single cause of fires at PTA.

- The introduction of an entirely new weapons system – the Mobile Gun System (“MGS”) – at Range 11T, as well as the increased use of mortars, would increase the potential for ammunition to land outside of targeted areas, increasing the size of areas where impacts – including catastrophic wildfires – are likely to occur.
- The proposed maneuver training with Strykers at Range 8 would increase the size of the area affected by the range’s use, including nearby areas to the sides of the range that were not previously in the line of fire.

6. The mere fact that, decades ago, tanks firing 105mm rounds used Range 11T does not, as the Army alleges, disprove claims the MGS’s use of Range 11T would threaten substantial harm to biological resources at PTA.

Rationale:

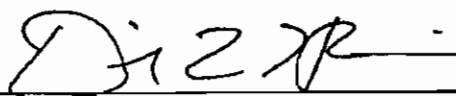
- The lack of available wildfire data from the time tanks trained at Range 11T means there is no way to assess the frequency or intensity of fires associated with such training at PTA.
- The lack of available data regarding the number and distribution of rare, threatened and endangered species at PTA prior to training with

tanks at Range 11T means there is no way to assess the impact on biological resources of such training.

- Although the range of invasive fountain grass during the time tanks were being used at PTA is unrecorded, the rapid spread of fountain grass over the past 15 years indicates that its abundance and total fuel load at Range 11T – and elsewhere on the installation within the surface danger zone of rounds fired from Range 11T – was likely substantially less. Thus, the risk of catastrophic fires at the time tanks used Range 11T was substantially less than it is at present.

DATED: Honolulu, Hawai'i, December 10, 2006.

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